

# Process Flat Conductivity-Salinity Sensor with Modbus output MBRTU-ECFLAT

SKU: MBRTU-ECFLAT

Doc No: MBRTU-ECFLAT-DS-EN-10

## Introduction

MBRTU-ECFLAT is Process Flat 4-electrode type Conductivity sensor, to measure very wide range conductivity 0 - 500 mS/cm. The robust POM sensor body with 316SS electrodes allow the sensor withstand the highly corrosive environment like waste water, sea water, process water...The electrode comes with dual 1" NPT threads, a durable POM body and is submersible. Output is Modbus RTU for easily integrating with any PLC, controller, SCADA, BMS or IoT gateway.

- Wide measurement range with 4-electrode design;
- Compensation for coating and build-up
- Diagnostic for fouling detection;
- Standard ModbusRTU output;

## Typical Applications

MBRTU-ECFLAT is used in monitoring of electrical conductivity or salinity in:

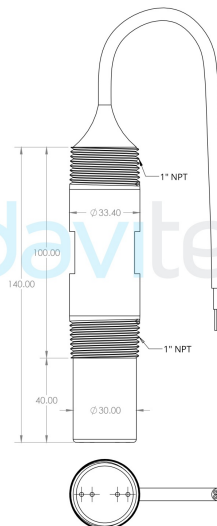
- Waste water;
- Aquaculture;
- Process liquids;
- ...

ADVANCED CONDUCTIVITY-SALINITY SENSOR  
MBRTU-ECFLAT



MBRTU-ECFLAT-H1.PNG

DIMENSION DRAWING OF MBRTU-ECFLAT  
(Unit: mm)



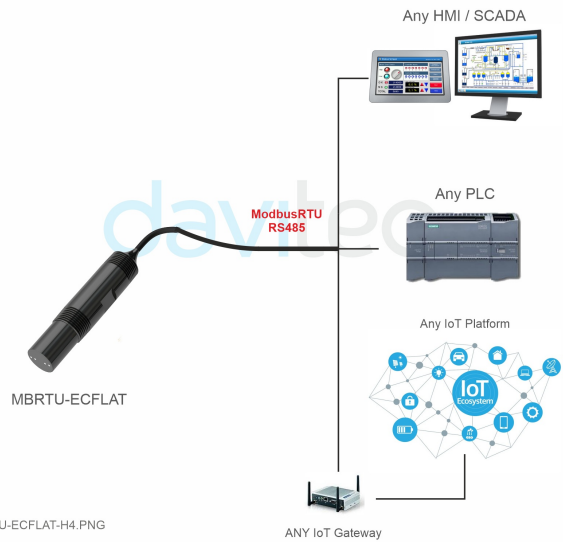
MBRTU-ECFLAT-H2.PNG

## MEASURING CONDUCTIVITY-SALINITY IN WATER



MBRTU-ECFLAT-H3.PNG

## CONNECT SENSORS TO any PLC, HMI, SCADA or IoT Platform via Modbus RTU



MBRTU-ECFLAT-H4.PNG

## Specification

EC SENSOR SPECIFICATION	
Sensing Technology	4-electrode measurement with Pt100 sensor
Measuring range	0 - 500 mS/cm
Resolution	0.01 mS
Accuracy	+/- 0.1 mS
Response Time	T90 < 30s
Working process temperature	5 .. 80 oC (compensated)
Working process pressure	0 .. 100 psig
Process connection	1" NPT both ends
Wetted parts	POM
Sensor Cable	6m
Rating	IP68
Sensor Dimension	D34 x 140 (mm)
Sensor net weight	< 200 grams
EC TRANSMITTER SPECIFICATION	
Inputs	4-electrode EC sensor
Output	RS485, ModbusRTU protocol, max 19200 baud
Power supply	9..36VDC, avg. < 200mA
Mounting	DIN Rail

Working temperature	-40 .. 85 oC
Working humidity	0 .. 95% RH, non-condensing
Housing	Engineered Plastic
Ingress Protection	IP20
Dimension	93 x 40 (mm)
Net weight	<200 grams

## Ordering Code

Item code	Descriptions
MBRTU-ECFLAT-K10	ADVANCED CONDUCTIVITY-SALINITY SENSOR, 4-ELECTRODES FLAT TYPE, IP68, K=10, 1" NPT SUBMERSIBLE, MODBUSRTU RS485 OUTPUT, 9-36VDC, 6M CABLE
<b>Accessories</b>	
RS485-FM12-USB-1	RS485 FEMALE M12 4-PIN, CODING A TO USB CABLE WITH POWER ADAPTER 12VDC/2.0A FOR CONFIGURATION
* Configuration cable for pH sensor, Windows' software is free. Contact our sales for more information.	

🚩 Link to download datasheet: <https://filerun.daviteq.com/wl/?id=RqiwTGLrMVmBgTiYK2mVPNleyICPn0N4>

🚩 Link for manual:



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